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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/770,397	01/29/2001	Susumu Senshu	202442US6	6175
22850 7590 10/29/2007 OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314			EXAMINER KLIMACH, PAULA W	
			ART UNIT 2135	PAPER NUMBER
			NOTIFICATION DATE 10/29/2007	DELIVERY MODE ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary

Application No.

09/770,397

Applicant(s)

SENSHU, SUSUMU

Examiner

Paula W. Klimach

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 August 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 02/09/07 has been entered.

Response to Arguments

Applicant's arguments filed 08/08/07 have been fully considered.

The applicant argued that while the Disk key described in Kato is a set of master encryption keys merely recorded to a disc and otherwise unrelated to the disc, the recording medium ID recited in Claim 1 is a value that is unique and corresponds to the specific recording medium in question. This is not found persuasive. The disk key of Kato is a unique key by definition because it is the key that is for the particular disk. The disk key is also related to or corresponds to the disk because it is written on the disc and therefore each disk key and the disc have a relationship wherein they agree with one another. The disk key is written on the disc and therefore represents the disk that it is written on.

The applicant argues that neither Kato nor Katoh, nor Kaplan teach encrypting the write identification information which is generated for every recording operation performed on the digital data, by use of the recording medium. This is not found persuasive. In the combination of Kato, Katoh, and Kaplan, Kato teaches the Disk key that corresponds to the recording medium ID. In the description of Kaplan, given below, the Master key performs the function of the

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recording medium in the encryption of the write identification information. However, the combination utilizes the disk key of Kato to encrypt the write identification of Kaplan as performed by the Master key of Kaplan.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kato et al (6,301,663) in view of Katoh (2002/0073037) and further in view of the article by Kaplan ("IBM Cryptolopes™, SuperDistribution and Digital Rights Management").

In reference to claims 1, 6, and 10, Kato discloses a method and system for protecting against unauthorized copy of multimedia (abstract). The method comprises the steps of: Kato further discloses encrypting data identification information of the digital data (column 6 lines 20-24). The Disc key corresponds to the recording medium ID in encryption of data in the form of audio data, which contains the watermark (column 16 lines 15-20), which contains a master key. The Disc key further corresponds to the medium ID since the key identifies the disk in that it is a key belonging to the disk. The watermark contains the master key (column 9 lines 44-47). Therefore the master key (write identification information) is encrypted by the disk key.

Although Kato discloses the use of a disk key (recording medium ID), Kato does not disclose obtaining a recording medium ID associated with the recording medium. Furthermore

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Kato does not disclose generating independent write identification information for each recording operation of the digital data. Although Kato discloses the use of a disk key to encrypt information, Kato does not disclose encrypting data identification information of the digital data and data control information by the use of the write identification information and encrypting the write identification information by use of the recording medium ID.

Katoh discloses a system and method for controlling copy generation of digital data stored in recording media to protect the data from unauthorized copying (abstract). In the system disclosed by Katoh, there exists a disc ID (page 2 paragraph 0022) and a means to detect and therefore obtain the ID (part 214 Fig. 2 in combination with page 2 paragraph 0024). Katoh further teaches generating independent write identification for every recording operation performed on the digital data (page 2 paragraphs 0020-0022).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to have a disc ID and a method to obtain the disc ID and generating independent write identification for every recording operation performed on the digital data as in Katoh in the system of Kato. One of ordinary skill in the art would have been motivated to do this because the disc ID is useful information for controlling copy control information.

However Katoh does not disclose encrypting the write identification information by use of the recording medium ID; and recording at least the encrypted data identification information and data control information to the recording medium.

Kaplan discloses generating independent write identification information for each recording operation of the digital data (Fingerprinting/watermarking instructions/specifications paragraph 4 page 4 and page 5 paragraph 1); the cryptolope can add individualized fingerprints

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and the identify the licensee or purchaser of each authorized or licensed copy. The cryptolope encrypts data identification information of the digital data and data control information (Fig. 1 Encrypted Fingerprint and watermark instructions) by use of the write identification information (master key). Kaplan further discloses recording at least the encrypted data identification information and data control information to the recording medium (SuperDistribution page 2).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to encrypt the encryption key as in the Cryptolopes of Kaplan in the system of Kato using the disk key of Kato. One of ordinary skill in the art would have been motivated to do this because this means that royalty/licensing clearing centers do not have to maintain a database of all documents keys, instead, each clearing center maintains a small database of master keys.

In reference to claims 2, 7, and 11, wherein the digital data is encrypted by the data identification information, and the encrypted digital data is recorded to the recording medium along with the encrypted data identification information and data control information (column 7 lines 34-36).

In reference to claims 3, 8, and 12, wherein the data control information includes copy control information for the digital data (column 6 line 66 to column 7 line 1).

In reference to claims 4, 9, and 13, wherein the encrypted data identification information and data control information, and the write identification information (column 10 lines 48-52) are encrypted by the use of recording medium unique to the recording medium and recorded to the recording medium (column 6 lines 1-42).

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In reference to claims 5 and 14, wherein a data processing unit for encrypting the data identification information and data control information and a data recording unit for recording data to the recording medium are mounted separately, and the write identification information is generated at the data recording unit, and the generated write identification information is encrypted and transmitted to the data processing unit (Fig. 1).

In reference to claim 15, 19, and 22, Kato discloses a method and system for protecting against unauthorized copy of multimedia (abstract) comprising the steps of: reproducing encrypted data identification information and write identification information, which are encrypted by the use of recording medium identification information from the recording medium (Fig. 2 part S13 in combination with column 5 lines 57-62); decrypting the encrypted data identification information and data by the use of the write identification information, and taking out the data identification information of the digital data and data control information (Fig. 2 part S13 and S16 in combination with column 7 line 66 to column 8 line 6).

Although Kato discloses recording the copy control and the encryption of the disc key, therefore the potential to store and encrypt the copy control, Kato does not expressly disclose encrypting data control information by the use of the write identification information.

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to encrypt the copy control in the system of Kato. One of ordinary skill in the art would have been motivated to do this because encryption discourages fraud and increases the security of digital data.

Kato does not disclose obtaining a recording medium ID associated with the recording medium; and encrypting the write identification information by use of the recording medium ID.

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Kaplan discloses a system that obtaining a master key to encrypt the keys of the cryptolope (page 3; Key records; paragraph 1). The master key corresponds to the recording medium id. The master key is obtained from the clearing center (page 4 paragraph 2). The identification information is encrypted using the recording medium ID (page 3; Key records; paragraph 1). The document keys correspond to the identification information; these are encrypted using the master key (recording medium ID). The master key is unique to the particular collection of documents (page 9 paragraph 1).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to encrypt the encryption key as in the Cryptolopes of Kaplan in the system of Kato. One of ordinary skill in the art would have been motivated to do this because this means that royalty/licensing clearing centers do not have to maintain a database of all documents keys, instead, each clearing center maintains a small database of master keys.

In reference to claims 16, 20 and 23, wherein the digital data is encrypted by the data identification information and recorded to the recording medium, and the encrypted digital data is reproduced from the recording medium along with the encrypted data identification information and data control information, and the write identification information (column 7 lines 34-36).

In reference to claims 17, 21, and 24, wherein the encrypted data identification information and data control information, and the write identification information (column 10 lines 48-52) are encrypted by the use of the recording medium identification information peculiar to the recording medium (column 6 lines 1-42) and recorded to the recording medium, and the recording medium identification information is reproduced from the recording medium, and the

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data encrypted by the recording medium identification information are decrypted by the use of the recording medium identification information, and the encrypted data identification information and data control information, and the write identification information are taken out (Fig. 1).

In reference to claim 18, wherein a data processing unit for encrypting the data identification information and data control information and a data recording unit for recording data to the recording medium are mounted separately, and the write identification information is generated at the data recording unit, and the generated write identification information is encrypted and transmitted to the data processing unit (Fig. 1).

In reference to claim 25, wherein said generating step includes generating the write identification information with a random number generator (part 113 Fig. 10).

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

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however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Paula W. Klimach whose telephone number is (571) 272-3854.

The examiner can normally be reached on Mon to Thr 9:30 a.m to 5:30 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim Vu can be reached on (571) 272-3859. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

PWK
Friday, October 19, 2007



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